

WHAT WE CLAIM IS:

1 A sliding roof device for vehicles, comprising:

a movable panel to open or close an opening portion provided at a vehicle roof;
a pair of guide rails provided at both sides in width direction of the opening portion and extending in longitudinal direction of the vehicle;

an operation mechanism guided by the guide rail and supporting the movable panel;

a drive device driving the operation mechanism; and

a spur tooth rack belt connecting the operation mechanism with the drive device;
wherein the drive device includes a drive gearwheel engaging with the spur gear rack belt, and the drive gearwheel is formed with variable tooth thickness along the gear width.

2. A slide door opening and closing device for vehicles according to claim 1, wherein the drive device is formed as trapezoidal cone.